

Title (en)
METHOD FOR PRODUCING OLEFIN

Title (de)
VERFAHREN ZUR HERSTELLUNG VON OLEFIN

Title (fr)
PROCÉDÉ DE PRODUCTION D'OLÉFINE

Publication
EP 2805933 B1 20161214 (EN)

Application
EP 12865945 A 20121220

Priority
• JP 2012010148 A 20120120
• JP 2012010149 A 20120120
• JP 2012083124 W 20121220

Abstract (en)
[origin: EP2805933A1] The invention has objects of providing an olefin production method which can produce an olefin with high efficiency by the dehydration reaction of an alcohol even in the presence of a ketone without the occurrence of side reactions such as the Aldol condensation of the ketone, as well as providing an olefin production method which can produce an olefin with high activity and high selectivity in a single reaction step by directly reacting a corresponding ketone and hydrogen. The former olefin production method of the invention produces an olefin from an alcohol using a silica gel (A) as a dehydration catalyst which is obtained by bringing a silica gel (X) prepared from an alkyl orthosilicate into contact with a water-soluble aluminum compound and calcining the contact product or is obtained from a wet-process silica gel (Y) prepared from an alkali silicate and which contains an aluminum compound at 10 to 1000 ppm in terms of aluminum element as well as an alkali metal and an alkaline earth metal at a total of 0 to 350 ppm. The latter olefin production method produces an olefin from a ketone and hydrogen in a single reaction step in the presence of the silica gel (A) and a silver-containing inorganic substance (B).

IPC 8 full level
C07B 61/00 (2006.01); **C07C 1/207** (2006.01); **C07C 1/24** (2006.01); **C07C 11/06** (2006.01)

CPC (source: EP KR US)
B01J 21/02 (2013.01 - KR); **C07B 61/00** (2013.01 - KR); **C07C 1/20** (2013.01 - KR); **C07C 1/207** (2013.01 - EP US); **C07C 1/22** (2013.01 - KR); **C07C 1/24** (2013.01 - EP US); **C07C 11/06** (2013.01 - KR); **C07C 2521/02** (2013.01 - EP US); **C07C 2521/08** (2013.01 - EP US); **C07C 2521/12** (2013.01 - US); **C07C 2523/02** (2013.01 - EP US); **C07C 2523/04** (2013.01 - EP US); **Y02P 20/52** (2015.11 - EP US)

Citation (examination)
US 2377026 A 19450529 - MILLER HOKE S

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2805933 A1 20141126; **EP 2805933 A4 20150819**; **EP 2805933 B1 20161214**; CN 104053639 A 20140917; ES 2609779 T3 20170424; IN 6848DEN2014 A 20150522; JP 5738439 B2 20150624; JP WO2013108543 A1 20150511; KR 101585365 B1 20160113; KR 20140099931 A 20140813; MY 168428 A 20181109; SA 113340210 B1 20150722; TW 201334865 A 20130901; TW I568493 B 20170201; US 2014371502 A1 20141218; US 9567266 B2 20170214; WO 2013108543 A1 20130725

DOCDB simple family (application)
EP 12865945 A 20121220; CN 201280067330 A 20121220; ES 12865945 T 20121220; IN 6848DEN2014 A 20140814; JP 2012083124 W 20121220; JP 2013554217 A 20121220; KR 20147018090 A 20121220; MY PI2014701805 A 20121220; SA 113340210 A 20130119; TW 102101454 A 20130115; US 201214372370 A 20121220